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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,814	12/16/2003	Gerald P. Michalak	2002-030	5394

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CARY, NC 27511

EXAMINER

MILORD, MARCEAU

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/736,814

Applicant(s)

MICHALAK, GERALD P.

Examiner

Marceau Milord

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1- 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (US Patent No 7076277 B2) in view of Holmes et al (US Patent No 6889065 B2).

Regarding claims 1, 19-25, Kim et al discloses a mobile device (fig. 4) comprising: a mobile terminal with an associated housing, a wireless headset (col. 3, line 42- col. 4, line 7; col. 5, line 63- col. 6, line 6).

However, Kim et al does not specifically disclose the features of a fastener disposed on the housing for mechanically connecting the wireless headset to the housing.

Holmes et al, on the other hand, discloses a system and method for adapting a wireless device, such as a Bluetooth-enabled mobile device or other Bluetooth-enabled device to a hands-free car kit or similar system. The adapter module is physically configured so that it can be inserted directly into the cradle in place of the phone. Once inserted into the cradle, the adapter

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module makes electrical contact with the connector in the cradle with a matching connector on one side of the adapter module. The mated connectors provide power to the adapter module and bi-directional communications between the adapter module and the hands-free car kit. The adapter module includes circuitry for communicating with the Bluetooth-enabled mobile device and the hands-free car kit in order to exchange communications signals between the Bluetooth-enabled mobile device and the hands-free car kit (col. 6, lines 2-32; col. 7, lines 7-56; col. 8, lines 2-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of to the communication system of Kim in order to provide an adapter module for adapting a hands-free to a Bluetooth-enabled mobile device, allowing all Bluetooth enabled mobile devices to utilize an existing or otherwise incompatible hands-free kit.

Regarding claim 2, Kim et al as modified discloses a mobile device (fig. 4) wherein the wireless headset includes a speaker and a microphone (col. 5, lines 1-6).

Regarding claim 3, Kim et al as modified discloses a mobile device (fig. 4) wherein the wireless headset is adapted to operate in a first operating mode when mechanically connected to the housing and further wherein the wireless headset is adapted to operate in a second operating mode when mechanically disconnected from the housing (col. 7, lines 31-67; col. 8, lines 2-30).

Regarding claim 4, Kim et al as modified discloses a mobile device (fig. 4) wherein the wireless headset interfaces with the mobile terminal via a wireless interface when said wireless headset is operating in the second operating mode (col. 5, line 63- col. 6, line 58).

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Regarding claim 5, Kim et al as modified discloses a mobile device (fig. 4) wherein the wireless headset interfaces with the mobile terminal via an electrical interface when said wireless headset is operating in the first operating mode (col. 5, lines 63- col. 6, line 6).

Regarding claim 6, Kim et al as modified discloses a mobile device (fig. 4) further comprising a first electrical contact disposed on the housing and a second electrical contact disposed on the wireless headset, wherein the first electrical contact electrically connects to the second electrical contact when said wireless headset is operating in the first operating mode (col. 5, lines 1-33).

Claims 7-8 contain similar limitations addressed in claim 1, and therefore are rejected under a similar rationale.

Regarding claim 26, Kim et al as modified discloses a mobile device (fig. 4) wherein the mobile terminal does not include a speaker and microphone in the housing and therefore is incapable of communicating audible signals with a user except in conjunction with the wireless headset (col. 5, line 63- col. 6, line 67).

Regarding claim 27, Kim et al discloses a mobile terminal (fig. 4) comprising a detector circuit to determine a position of a wireless headset relative to the mobile terminal, wherein the mobile terminal automatically establishes a wireless or electrical interface between the mobile terminal and the wireless headset dependent on the determined position (col. 3, line 42- col. 4, line 7; col. 5, line 63- col. 6, line 6).

However, Kim et al does not specifically disclose the features of a fastener disposed on the housing for mechanically connecting the wireless headset to the housing.

Holmes et al, on the other hand, discloses a system and method for adapting a wireless device, such as a Bluetooth-enabled mobile device or other Bluetooth-enabled device to a hands-free car kit or similar system. The adapter module is physically configured so that it can be inserted directly into the cradle in place of the phone. Once inserted into the cradle, the adapter module makes electrical contact with the connector in the cradle with a matching connector on one side of the adapter module. The mated connectors provide power to the adapter module and bi-directional communications between the adapter module and the hands-free car kit. The adapter module includes circuitry for communicating with the Bluetooth-enabled mobile device and the hands-free car kit in order to exchange communications signals between the Bluetooth-enabled mobile device and the hands-free car kit (col. 6, lines 2-32; col. 7, lines 7-56; col. 8, lines 2-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of to the communication system of Kim in order to provide an adapter module for adapting a hands-free to a Bluetooth-enabled mobile device, allowing all Bluetooth enabled mobile devices to utilize an existing or otherwise incompatible hands-free kit.

Regarding claim 28, Kim et al as modified discloses a mobile terminal (fig. 4) wherein the wireless interface comprises a short-range wireless network (col. 5, lines 1-18).

Regarding claim 29, Kim et al as modified discloses a mobile terminal (fig. 4) wherein the short-range wireless network comprises a short-range ad hoc wireless network (col. 5, lines 1-18).

Regarding claim 30, Kim et al as modified discloses a mobile terminal (fig. 4) wherein the mobile terminal establishes the wireless interface between the mobile terminal and the

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wireless headset when the detector circuit determines that the wireless headset is mechanically disconnected from the mobile terminal (col. 7, lines 31-67; col. 8, lines 2-30).

Regarding claim 31, Kim et al as modified discloses a mobile terminal (fig. 4) wherein the mobile terminal establishes the electrical interface between the mobile terminal and the wireless headset when the detector circuit determines that the wireless headset is mechanically connected to the mobile terminal (col. 7, lines 31-52).

Regarding claim 32, Kim et al as modified discloses a mobile terminal (fig. 4) wherein the detector circuit determines that the wireless headset is mechanically connected to the mobile terminal when the detector circuit detects electrical current flow between the mobile terminal and the wireless headset (col. 7, line 32- col. 8, line 15).

Regarding claim 33, Kim et al as modified discloses a mobile terminal (fig. 4) wherein the detector circuit detects electrical current flow between the mobile terminal and the wireless headset by detecting electrical current flow between mobile terminal circuitry and headset circuitry (col. 7, lines 45-56).

Regarding claim 34, Kim et al as modified discloses a mobile terminal (fig. 4) wherein the mobile terminal comprises a cellular telephone (col. 5, lines 63- col. 6, line 6).

Regarding claims 35-39, Kim et al discloses a method of selecting a communication interface (fig. 4) between a mobile terminal and a wireless headset, the method comprising: a headset and automatically selecting an electrical-interface operating mode when the wireless headset is mechanically connected to the mobile terminal (col. 3, line 42- col. 4, line 7; col. 5, line 63- col. 6, line 6); and automatically selecting a wireless-interface operating mode when the

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wireless headset is mechanically disconnected from the mobile terminal (col. 7, lines 31-67; col. 8, lines 2-30).

However, Kim et al does not specifically disclose the step of determining if the wireless headset is mechanically connected to the mobile terminal. Holmes et al, on the other hand, discloses a system and method for adapting a wireless device, such as a Bluetooth-enabled mobile device or other Bluetooth-enabled device to a hands-free car kit or similar system. The adapter module is physically configured so that it can be inserted directly into the cradle in place of the phone. Once inserted into the cradle, the adapter module makes electrical contact with the connector in the cradle with a matching connector on one side of the adapter module. The mated connectors provide power to the adapter module and bi-directional communications between the adapter module and the hands-free car kit. The adapter module includes circuitry for communicating with the Bluetooth-enabled mobile device and the hands-free car kit in order to exchange communications signals between the Bluetooth-enabled mobile device and the hands-free car kit (col. 6, lines 2-32; col. 7, lines 7-56; col. 8, lines 2-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of to the communication system of Kim in order to provide an adapter module for adapting a hands-free to a Bluetooth-enabled mobile device, allowing all Bluetooth enabled mobile devices to utilize an existing or otherwise incompatible hands-free kit.

Regarding claims 40-48, Kim et al discloses a mobile device (fig. 4) comprising: a headset; a mobile terminal a detector circuit for determining a position of the headset relative to the mobile terminal (col. 3, line 42- col. 4, line 7; col. 5, line 63- col. 6, line 6); and wherein the



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mobile device automatically selects one of two operating modes responsive to the determined position of the headset (col. 7, lines 31-67; col. 8, lines 2-30).

However, Kim et al does not specifically disclose the features a headset that is mechanically connected to the mobile terminal when the headset is secured within a recess disposed in at least one side of a housing of the mobile terminal.

Holmes et al, on the other hand, discloses a system and method for adapting a wireless device, such as a Bluetooth-enabled mobile device or other Bluetooth-enabled device to a hands-free car kit or similar system. The adapter module is physically configured so that it can be inserted directly into the cradle in place of the phone. Once inserted into the cradle, the adapter module makes electrical contact with the connector in the cradle with a matching connector on one side of the adapter module. The mated connectors provide power to the adapter module and bi-directional communications between the adapter module and the hands-free car kit. The adapter module includes circuitry for communicating with the Bluetooth-enabled mobile device and the hands-free car kit in order to exchange communications signals between the Bluetooth-enabled mobile device and the hands-free car kit (col. 6, lines 2-32; col. 7, lines 7-56; col. 8, lines 2-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of to the communication system of Kim in order to provide an adapter module for adapting a hands-free to a Bluetooth-enabled mobile device, allowing all Bluetooth enabled mobile devices to utilize an existing or otherwise incompatible hands-free kit.

Regarding claims 49-63, Kim et al discloses a mobile terminal (fig. 4) comprising: a speaker for projecting audible signals to a user; a microphone for receiving audible signals from

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the user; wherein said speaker and microphone interface with the mobile terminal via an electrical interface when said speaker and microphone are mechanically connected to the mobile terminal (col. 3, line 42- col. 4, line 7; col. 5, line 63- col. 6, line 6); and wherein said speaker and microphone interface with the mobile terminal via a wireless interface when said speaker and microphone are mechanically disconnected from the mobile terminal (col. 7, lines 31-67; col. 8, lines 2-30).

However, Kim et al does not specifically disclose the features of a wireless headset that is mechanically connected to the mobile terminal.

Holmes et al, on the other hand, discloses a system and method for adapting a wireless device, such as a Bluetooth-enabled mobile device or other Bluetooth-enabled device to a hands-free car kit or similar system. The adapter module is physically configured so that it can be inserted directly into the cradle in place of the phone. Once inserted into the cradle, the adapter module makes electrical contact with the connector in the cradle with a matching connector on one side of the adapter module. The mated connectors provide power to the adapter module and bi-directional communications between the adapter module and the hands-free car kit. The adapter module includes circuitry for communicating with the Bluetooth-enabled mobile device and the hands-free car kit in order to exchange communications signals between the Bluetooth-enabled mobile device and the hands-free car kit (col. 6, lines 2-32; col. 7, lines 7-56; col. 8, lines 2-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of to the communication system of Kim in order to provide an adapter module for adapting a hands-free to a Bluetooth-enabled mobile device,

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allowing all Bluetooth enabled mobile devices to utilize an existing or otherwise incompatible hands-free kit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 571-272-7853. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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